

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-001014**Date Inspected:** 09-Dec-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 2200**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Chen Xi**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** CalTrans mock up**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Dan Hernandez was present to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Item Description	WBS	Dwg No.	Status
1 114M upper shaft assembly			In Progress

Caltrans QA Inspector observed Submerged arc welding (SAW) in progress of corner weld connection skin plate C musc-ma112 to skin plate D musc-ma113. The weld joint is a complete Joint Penetration (CJP), double bevel T-joints. The welder was observed welding root pass in the 1G position using a chipping hammer and wire brushing to clean weld pass. The approved welder is identified as Mr. Yun Chuan Jin # 050360 using welding procedure specification WPS-B-T-2221-C-U2B-5. Caltrans QA measured current welding parameters at approximately 654 amps, 32.5 volts and 612 millimeters per minute (mm/min). Preheat and interpass temperatures were verified during welding activities and were within approved WPS minimum and maximum range. SAW welding consumable is verified and identified as EM12K with JW3-948 flux. ZPMC Quality Control (QC) Certified Welding Inspector (CWI) Mr. Chen Xi was observed monitoring welding activities at the workstation.

**Summary of Conversations:**

As identified within the contents of this report.

**Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials

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## WELDING INSPECTION REPORT

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for your project.

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**Inspected By:** Hernandez,Dan

Quality Assurance Inspector

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**Reviewed By:** Cuellar,Robert

QA Reviewer